Patent claims

1. A method for error handling in a real-time automation system, in which method at least one error reaction function (FT1, FT2, FT3) is triggered by at least one processing error (F) and/or at least one access error (F), the error reaction function (FT1, FT2, FT3) being at least parameterizable and/or programmable.

2. A method for error handling in a real-time automation system which has at least two execution levels (a, 1A, 2A, 3A, 4A, 5A), in which method at least one processing error (F) and/or access error (F) on one execution level (A) causes at least one error reaction function (FT1, FT2, FT3) to be triggered on at least one of the further execution levels (A).

3. The method as claimed in claim 2, characterized in that the error reaction function (FT1, FT2, FT3) is respectively handled on the further execution level (A), which has lower priority than the respective execution level (A) on which the processing error (F) and/or the access error (F) occurred.

4. The method as claimed in claim 2 or 3, characterized in that an error reaction function (FT1, FT2, FT3) is triggered by the processing error (F) and/or the access error (F) on the same execution level (A) as the processing error (F) and/or access error (F), and in that a further error reaction function (FT1, FT2, FT3) is triggered on at least one execution level (A) of lower priority.

5. The method as claimed in one of claims 2 to 4, characterized in that a real-time automation system is used as the automation system.

6. The method as claimed in claim 2 or 5, characterized in that the error reaction function (FT1, FT2, FT3) is parameterized and/or programmed before triggering.

7. The method as claimed in one of claims 1 to 6, characterized in that access errors (F) are corrected with the aid of parameterizable access functions (FT1, FT2, FT3).

8. The method as claimed in one of claims 1 to 7, characterized in that at least high-priority cyclical system functions (HZST) are executed without being influenced by the error reaction function (FT1, FT2, FT3).

9. The method as claimed in one of the preceding claims 1 to 8, characterized in that at least high-priority cyclical system functions (HZST) are also continued without being aborted when an error reaction function (FT1, FT2, FT3) is executed.

10. The method as claimed in one of the preceding claims 1 to 9, characterized in that functions which have an error function (F) are aborted, whereby reliable behavior of the automation system is ensured.

11. The method as claimed in one of the preceding claims 1 to 10, characterized in that aborted non-cyclical functions (NNT) are restarted, taking the respectively preceding terminated function (NNT) as a basis.

12. The method as claimed in one of the preceding claims 1 to 10, characterized in that, in the event of errors (F) in cyclical functions (NZT, HZT), the automation system is stopped.

13. The method as claimed in one of the preceding claims 1 to 11, characterized in that, when errors (F) occur due to the automation system, consistent system behavior is produced without stopping the automation system.

14. The use of the method as claimed in one of the preceding claims, characterized in that it is used in the case of a machine tool and/or a production machine.

15. A device for carrying out the method according to one of the preceding claims, characterized in that the device is an automation system.